TITLE 62: MINING CHAPTER I: DEPARTMENT OF NATURAL RESOURCES

PART 1825 SPECIAL PERMANENT PROGRAM PERFORMANCE STANDARDS--OPERATIONS ON HIGH CAPABILITY LANDS

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AUTHORITY: Implementing and authorized by the Surface Coal Mining Land Conservation and Reclamation Act [225 ILCS 720].

SOURCE: Adopted at 4 Ill. Reg. 37, p. 1, effective June 1, 1982; amended at 6 Ill. Reg. 1, effective June 1, 1982; emergency amendment at 6 Ill. Reg. 8502, effective July 1, 1982, for a maximum of 150 days; codified at 8 Ill. Reg. 9363; amended at 6 Ill. Reg. 9987, effective September 3, 1982; amended at 10 Ill. Reg. 9628, effective July 1, 1986; amended at 11 Ill. Reg. 8526, effective July 1, 1987; amended at 20 Ill. Reg. 2130, effective January 19, 1996, amended at 22 Ill. Reg. 20286, effective November 5, 1998; amended at 26 Ill. Reg. 4288, effective March 6, 2002.

Section 1825.1 Scope

This Part sets forth requirements for coal preparation plants not within the permit area for a specific mine other than those plants which are located at the site of ultimate coal use.

(Source: Added at 11 Ill. Reg. 8511, effective July 1, 1987)

Section 1825.11 High Capability Lands: Special Requirements

All high capability lands to be mined and reclaimed shall meet the following requirements, or meet the requirements of 62 Ill. Adm. Code 1816.133:

- a) A permit shall be obtained for these operations as required by 62 Ill. Adm. Code 1773;
- b) Darkened surface soil materials to be used in the reconstruction of high capability lands shall be removed before drilling for blasting or mining or other surface disturbances, in accordance with Section 1825.12 and in a manner that prevents mixing or contaminating these materials with undesirable material. Where removal of soil materials results in erosion that may cause air and water pollution,

the Illinois Department of Natural Resources (Department) shall specify methods to control erosion of exposed overburden;

- c) Revegetation success on high capability lands shall be measured in accordance with 62 Ill. Adm. Code 1816.116, except that the five year period of responsibility for revegetation shall commence at the date of initial planting of the crop being grown only in cases where the operator has chosen to show success of revegetation by using the land to grow crops. Measurement of success of revegetation shall be initiated within ten years after completion of backfilling and final grading on high capability land; and
- d) The requirements of this Part are in addition to the other requirements of these regulations.

(Source: Amended at 22 Ill. Reg. 20286, effective November 5, 1998)

Section 1825.12 High Capability Lands: Soil Removal

- a) Surface mining operations on high capability lands shall be conducted as follows:
 - 1) The darkened surface soil shall be removed and segregated, if not used immediately, from other materials. In no cases shall less than the top eight (8) inches of surface soil, darkened or not, be segregated for replacement; and
 - 2) Darkened surface soil segregation and replacement requirements may be altered by the Department only if it has determined the provisions of 62 Ill. Adm. Code 1816.22(b) have been met.
- b) The Department may require root medium stockpiling if necessary to meet the requirements of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et seq.), and these regulations.

(Source: Amended at 11 III. Reg. 1825, effective July 1, 1987)

Section 1825.13 High Capability Lands: Soil Stockpiling

If not used immediately, the darkened surface soil or its equivalent as approved by the Department and the root medium if the root medium is stockpiled in accordance with Section 1825.12 shall be stockpiled separately and these materials shall be stockpiled separately from other spoil, and provided needed protection from wind and water erosion or contamination by acid or toxic or non-soil material. Signs shall be erected to indicate the contents of each stockpile.

Section 1825.14 High Capability Lands: Soil Replacement

Surface mining operations on high capability lands shall be conducted according to the following:

- a) The operator shall establish a suitable rooting medium.
 - Texture. In order to be of suitable texture, the materials under the darkened surface soil suitable as a root medium shall contain no more than 20% coarse material (greater than 2mm in size) by volume. No more than half of the coarse material may be between 3 inches and 10 inches in the greatest dimension. No fragments shall be greater in size than 10 inches in the greatest dimension. In no case may clay material of less than 2 microns be greater than 40% by weight of the soil size material nor shall the sand size material of greater than 50 microns be greater than 60% by weight of the soil size material, when clay material content is less than 20% by weight.
 - A) Rapid weathering coarse material, as determined by the Department, may be included in the root medium. If these fragments are allowed, they shall be included in the soil fraction for texture determination and shall not be included in the coarse fragment portion of texture evaluation.
 - B) These texture requirements do not apply if the soil conditions of the affected land prior to mining did not meet the standards included herein (i.e., if more than 20% coarse material by volume existed in the root medium below the darkened surface soil prior to mining, the same percentage or coarse material in the root medium will be allowed after mining; if more than ½ of the coarse material consisted of rocks in the 3 to 10 inch size category prior to mining, the same percentage will be permitted after mining; and if more than 40% by weight of clay materials is less than 2 microns in size; and if more than 60% by weight of sand when clay material content is less than 20% by weight existed in the root medium below the darkened surface soil prior to mining, a like percentage by weight will be allowed after mining in the material under the darkened surface soil).
 - 2) Chemical Properties. The materials under the darkened surface soil must be chemically suitable as an agricultural root medium. Toxic material capable of producing chemically unsuitable conditions shall not be incorporated within the material used to create the root zone established for these lands.

- 3) Depth. The combined vertical thickness of the darkened surface soil and the agricultural root medium must be at least 4 feet in all cases, except where a natural rock formation occurs at shallower depths. In such case, the operator shall create a root medium of equivalent thickness to its pre-mining condition.
- 4) The darkened surface soil shall be replaced as the final earth cover on high capability lands.
- 5) Location of texture compliance samples will be determined by random methods. Texture analysis shall be determined by methods specified by the Department.
- b) The Department may alter the texture requirements under this Part only upon a clear and convincing showing that to vary such requirement would better effectuate the purposes of the Act than would enforcing the standards in this Part.
- c) The affected land shall be graded to the approximate original contour of the land prior to mining. For the purpose of this Part, the slope classification of lands before mining are those lettered ranges developed by the U.S. Department of Agriculture, Natural Resources Conservation Service for use in preparing a soil survey of the area.
- d) Approximate original contour means grading of affected lands to a slope no greater than the maximum percent of the pre-mining slope range of the individual soil map units.
- e) Compaction.
 - The agricultural root medium described in subsection (a) shall be replaced and regraded to a uniform depth over the regraded spoil material in a manner that avoids excessive compaction or a compaction alleviation plan shall be provided. Excessive compaction is indicated by:
 - A) Very firm, massive soil physical condition in any layer above the rooting medium depth required by subsection (a)(3) that has one-half or more of the soil volume in masses 10 inches or more in diameter that are not exploited by the root system;
 - B) Roots restricted to a depth less than the required rooting medium depth;
 - C) Confinement of roots to matrix desiccation cracks;

- D) Flattened roots; or
- E) Other diagnostic methods approved by the Department, in consultation with the Illinois Department of Agriculture and the U.S. Department of Agriculture, Natural Resources Conservation Service.
- Compaction alleviation is required unless the permittee can demonstrate that root system development at similar depths in undisturbed soils typical of the mined area is no better than that observed in the reconstructed soil or if the permittee can demonstrate that the requirements of 62 III. Adm. Code 1816.116(a)(3)(C) have been or could be met without compaction alleviation on areas reclaimed in a similar manner. However, the requirements of 62 III. Adm. Code 1816.116 or 1816.117 must still be met. The Department shall retain sufficient bond at the time of Phase II bond release if it determines that compaction alleviation may be needed to achieve the revegetation success requirements.
- 3) After approval of texture by the Department, the darkened surface soil shall be redistributed and graded to a uniform depth without excessive compaction over the replaced and regraded agricultural root medium.
- f) High capability lands shall have a planned erosion control system if expected soil loss from row crop production will exceed the tolerable soil loss limits as defined by "Resource Conservation Planning Technical Material-IL-4" and subsequent revisions or modifications. Terrace systems, when utilized as part of a planned erosion control system, shall be constructed according to U.S. Department of Agriculture, Natural Resources Conservation Service specifications. Erosion control plans in compliance with this subsection shall be submitted to and approved by the Department prior to the completion of the final grading of an area, or on a time schedule approved by the Department after final grading based on seasonal factors, the extent of the area, and the sophistication of the erosion control plan.
- g) Slopes of all affected lands shall be measured from the drainage divide to the base of the slope or to the intermittent water course at the lowest point. Abrupt slope changes between these points are not acceptable except for unusual conditions such as ditches, terraces, and roads.
- h) The length of slope and contour of the restored surface shall be conducive to those farming operations normally associated with row crop production. Farming operations as used here shall include such measures or practices necessary to provide adequate drainage and erosion control for sustained row crop production.

(Source: Amended at 26 Ill. Reg. 4288, effective March 6, 2002)